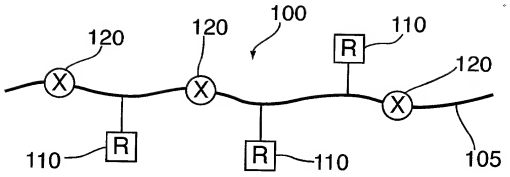
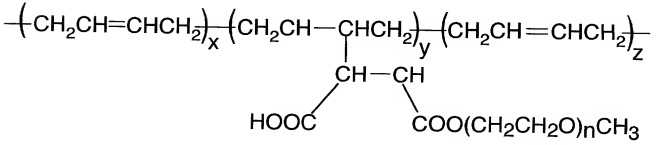
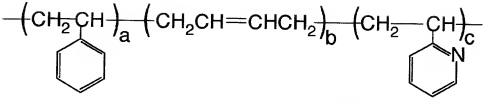


FIG. 1



x,y,z = any integer number and x+y+z < 20,000
n= integer number between 1 and 100

FIG. 2



a, b, c = any integer number

FIG. 3

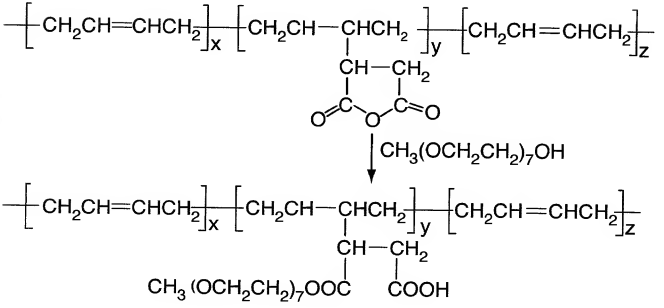


FIG. 4

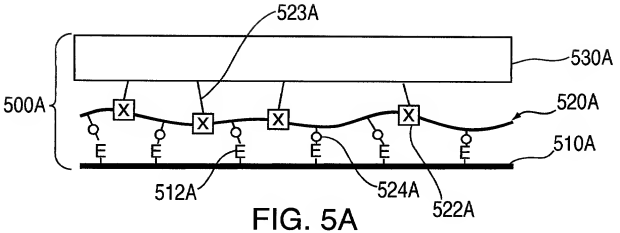


FIG. 5A

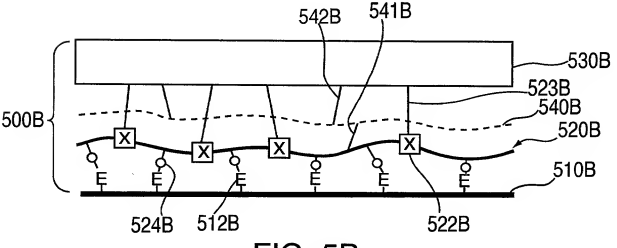


FIG. 5B

<u>Rubber</u>
(1) Natural rubber + Any synthetic rubber +
Accelerators + Sulfur and other standard rubber additives
(2) Maleinized Polybutadiene (or maleinized unsaturated polymer)

Water dispersible <u>coating</u> contains a mixture of:
(1) an acid modified polybutadiene and
(2) a Styrene-butadiene-Vinyl pyridine Latex

Fiber surface containing <u>Epoxy</u> groups

<u>Polyester Fiber</u>

FIG. 6A

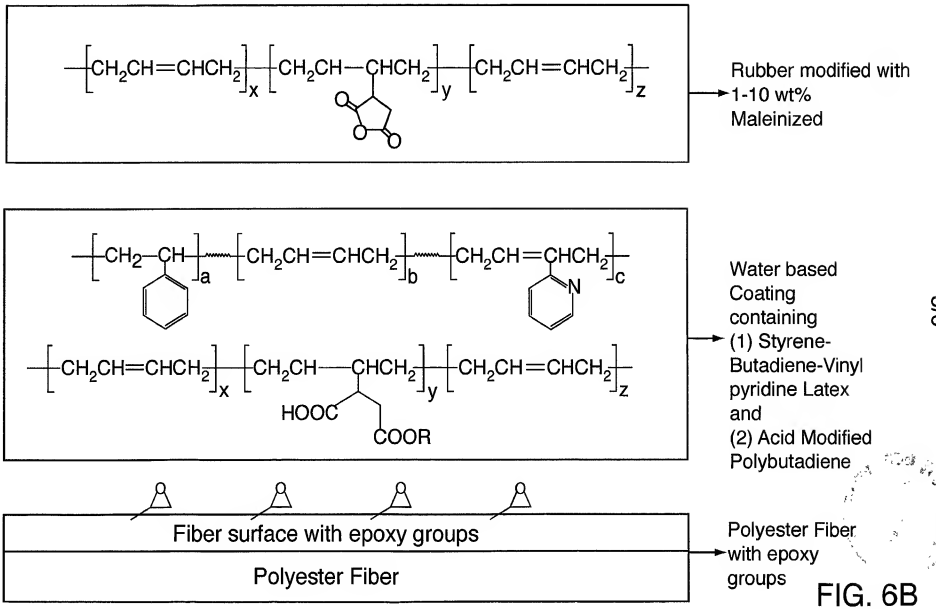

Rubber modified with 1-10 wt% Maleinized
Water based Coating containing (1) Styrene-Butadiene-Vinyl pyridine Latex and (2) Acid Modified Polybutadiene
Fiber surface with epoxy groups
Polyester Fiber
Polyester Fiber with epoxy groups

FIG. 6B

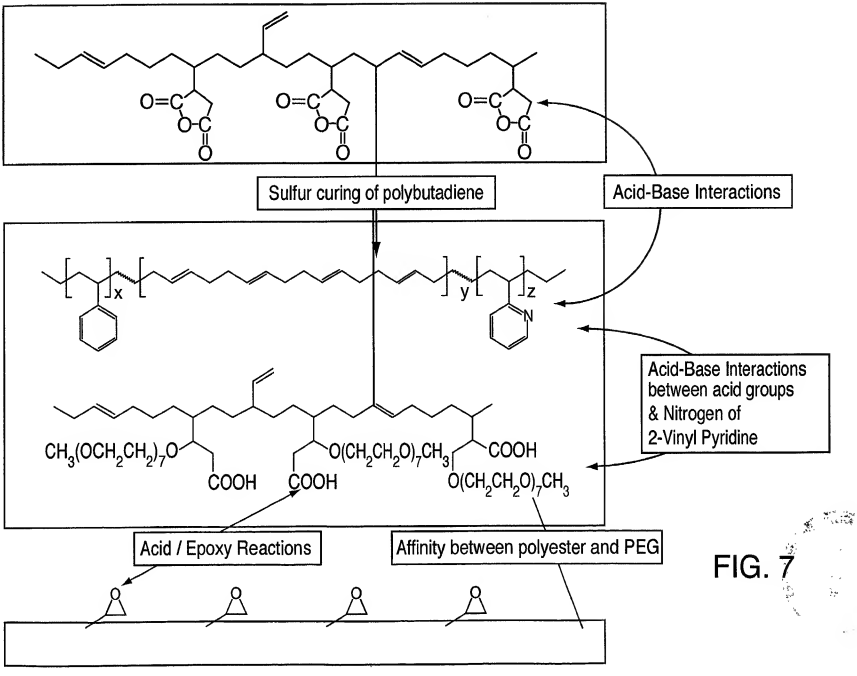

Sulfur curing of polybutadiene
Acid-Base Interactions
Acid-Base Interactions between acid groups & Nitrogen of 2-Vinyl Pyridine
Acid / Epoxy Reactions
Affinity between polyester and PEG

FIG. 7